Salt Production in the Lower Cape Fear
Part 1. Location and Extent of the State Salt Works at Wilmington

ISABEL M. WILLIAMS and LEORA H. McEACHERN

As Federal forces advanced down the North Carolina coast during the spring of 1862, the sites of proposed State salt works on Currituck and existing State works at Morehead fell to the enemy. It became apparent that the State salt works near Wilmington would have to be vastly enlarged, since the State operation at Saltville, Virginia, was not sufficient to supply the soldiers, their families, and the poor of North Carolina with the salt they required in order to exist.

The reports of the State Salt Commissioners, J. M. Worth and later David G. Worth, and the reports of Federal Naval officers in April, 1864, verify that the State salt works was indeed a large manufactory, and consequently must have occupied an extensive tract of land.

A clue to the location of this land occurs in a letter to General Gatlin from General W. H. C. Whiting on June 6, 1864, wherein he wrote: "I have once more, and finally directed the suspension of all salt-works, public and private, on that part of the sound lying between Masonboro Inlet and Fort Fisher." It is probable that at that time Masonboro Inlet lay south of the present inlet, roughly opposite Hewlett's Creek. Mrs. Addison Hewlett, who has done extensive research on the Masonboro lands, is positive that no large State salt works existed north of Purvice Creek, which divides Masonboro and Myrtle Grove. Mrs. Ida B. Kellam suggested that investigation be made on a tract of land on Myrtle Grove Sound conveyed by O. G. Parsley to the State of North Carolina on 26 April, 1862, the same day Fort Macon fell.

In New Hanover County Deed Book UU-674, a deed is recorded on that date between Oscar G. Parsley and the State of North Carolina for "... the sum of nine hundred and twenty-five dollars ... all that tract of Land on Myrtle Grove Sound ... whereon William R. Harper lately lived, and which was conveyed to the said William R. Harper by Anderson River and his wife Caroline by deed dated 14th October AD. 1854 ... and which was afterwards bought by John A. Sanders at public sale ... by deed dated 14th September AD. 1858..."

(Continued on Page Four)
MEETING

Time: October 29, 1970, 8:00 p.m.

Place: St. James Great Hall. Immediately after the meeting there will be a reception at the Latimer House for members and guests.

Speaker: Mrs. Marjory Barrlett Sanger.

Subject: "Billy Bartram in the Lower Cape Fear."

Mrs. Sanger, author and ecologist, was born in Baltimore and received a B.A. degree from Wellesley College. For the past ten years she has lived in Winter Park, Fla., where she has lectured at Rollins College and has lectured in the Advisory Board of the Rollins College Writers’ Conference. Her publications include: The Bird Watchers and Greenwood Summer, published by E. P. Dutton & Co., Mangrove Island, Cypress Country, and Checkerbuck’s Journey. The Migration of the Ruddy Turnstone, for the World Publishing Co., and World of the Great White Heron, published by Devin-Adair. She has just completed a biography of William Bartram, to be published by Farrar, Straus & Giroux. Bartram was an early American naturalist who explored the Southeast, and spent many years with relatives on the Cape Fear. Mrs. Sanger’s honorary society memberships include the American Ornithologists’ Union, Wilson Ornithological Society and the International Council for Bird Preservation. She represented the United States at the International Ornithological Congress at Oxford University, and the L.C.B.P. at Cambridge.

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CORPORATE

Carolinian Motel

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A Message from the President

This year we began the Society’s fifteenth year of service. Our membership consists of approximately five hundred individual members and thirty-three business members. A membership campaign is planned this fall. We are always eager to increase our membership, and you are urged to invite your friends and acquaintances to join us. Application cards are available through the Treasurer. Our mailing address is P. O. Box 813, Wilmington, N. C. 28401.

The Board of Directors met twice during the summer, committees were appointed and chairmen were requested to convene their respective committees to plan the year’s work.

Some interesting programs have been planned for the coming year, and we are anticipating at least two receptions, one near Christmas and another following the annual meeting in May at our headquarters, Latimer House. These receptions are planned for the enjoyment of our members and their guests and to utilize our headquarters.

Work at Old Town Plantation on the archaeological project is to be resumed for at least one week in September, under the direction of Mr. Garry Wheeler Stone, the State archaeologist. We anticipate completion of excavation on the early colonial house site which was first begun in April 1969 but delayed for lack of professional supervision. We are very fortunate to have Mr. Stone return to assist us in this important project at the site of the ill-fated settlement of Charles Town, 1664-1667, the first settlement of that name in Carolina. With so many demands for archaeology being made upon the Department of Archives and History from all over North Carolina, we are honored that our project has received the attention and interest of the state government. This is a very significant site and the Society can be justifiably proud of its support and sponsorship of this activity. The landowner, Mr. Hugh MacRae II, and Dr. Gerald H. Shinn and the university students deserve our thanks for their efforts and cooperation.

We are fortunate in having a capable and interested group of officers and directors. Much was accomplished under the able and dedicated leadership of our immediate past president, the Rev. Walter H. Allen, Jr.

We have made a good beginning, but much remains to be done. Many of our members have expressed a desire for greater utilization of our headquarters, Latimer House. A planned promotion of Wilmington’s heritage through the cooperation of its cultural and governmental agencies could make a significant contribution to the tourism of our city, which is still our largest industry. Some have suggested a marked tour such as the Capital City Trail in Raleigh or the Norfolk Tour in Norfolk as being examples of what we might well have in Wilmington. While retaining the interest of our other members, we need to encourage more participation in the Society by young people and newcomers whose interest could mean a great deal to us in the future. The continued support of the entire membership by prompt payment of dues, attendance at meetings, recruitment of new members, and words of advice, suggestion, and encouragement is solicited and appreciated. We want to maintain an active, growing Society.

The late Justice Oliver Wendell Holmes observed, “I find the great thing in this world is not so much where we stand, as in what direction we are moving.” Let us move forward with a positive attitude and with confidence, worthy of our rich heritage in the Lower Cape Fear.

JOHN H. DEBNAM

GIFFS

We gratefully acknowledge recent gifts to our records collection now in the archives room in the headquarters building, the Latimer House.

Thirty photographs of early members of the Lane, Ashe, Walker, Bell, Davis, Haywood, Hill, Moore and Cornell Families; the Catechism of the Episcopal Church, 1861; The New England Historical and Genealogical Register, (350th Pilgrim Anniversary), April, 1970, from Lt. Col. Chas. B. Gault, (Ret’d).

The James H. McCoy map collection consisting of 69 maps, includes six maps prior to 1600, thirteen 1600-1700, fifteen 1700-1800, and others pertaining to eastern North Carolina. Also Memoirs of General Joseph Gardner Swift, U.S.A., by Ellery, and a Day Book ledger of Grant-Hinton & Co., 1876-1877, with other items, from Miss Elizabeth McCoy.


The Diary of Mrs. Eliza Clithero, xerox copy, original at U.N.C. Chapel Hill, 542 pages, and xerox copies of 186 pages on the Wright, Walker, Robinson, deRosset, Rhett and Wrenn families, including deeds and wills, will of Dr. Archibald McNeill, father of Archibald F. McNeill listed by historians as outstanding performer in early Thalian plays, also shows relationship with Dr. Daniel McNeill, father of Anna Matilda McNeill Whistler, given by Dr. C. P. E. Burgwyn.

Research material on Castle Haynes plantation and its owners, Poitevint, Haynes, Waddell and Burgwin, includes copies of pages from St. Thomas and St. Denis Parish Register, land grants, wills and 13 pages from Transactions of the Huguenot Society, from Dr. Gerald H. Shinn.

South River Presbyterian Church—Session Book records, 1832-1884, from Mrs. Carl C. Campbell.

Xerox copies of Wills, deeds, family records—includes will of John Hill of Boston, father of our noted Hon. William Hill of Brunswick in pre-Revolutionary days, and a check for one hundred dollars from Mrs. Patrick H. Welder.

Some Sprunts of Scotland, by Anne Sprunt Srichton, 1964, from Miss Fanny de Rosset.

TOUR TO OLDTOWN HISTORIC SITE
SUNDAY, OCTOBER 25
MEET AT THE NEW BUS STATION
AT 2:00 P.M.
...this being the same tract conveyed by John A. Sanders to John T. Hewett by deed dated 21st day September 1861, and conveyed by John T. Hewett to Oscar G. Parsley [21 December 1861]. . . . beginning on the sound at a stake thirty six feet in a northwardly direction from a cedar post known as the beginning of Charles Craig's line, thence North seventy five degrees west to Henry Martindale's line thence with said line forty poles to a point thence South seventy five degrees East to a stake at the mouth of the creek thence southerly along Myrtle grove sound to the beginning, the same to contain two hundred & twenty acres more or less and bounded on the North by lands lately belonging to Thomas Craig deceased, on the east by the sound, on the south and southwest by Henry Martindale's lands, and on the west also by Henry Martindale's . . .')

On the following pages of the same book is recorded the sale of the same tract of land on 11 February, 1865 (between the fall of Fort Fisher and the occupation of Wilmington). At this time the tract was divided into two parcels of 110 acres each and sold by the State of North Carolina through its agent, David G. Worth. The south tract was purchased by Henry M. Bishop, and the north tract by Narcissa Ottaway. Each deed states that "said piece of land being a portion of the same . . . conveyed . . . by said Oscar G. Parsley to the State of North Carolina, whereon to erect salt works." 4

The exact location of this land has been an interesting pursuit, and we are indebted to James Carr and James Swails whose law firm has searched titles on the northern section of Myrtle Grove, as well as to Henry von Oesen and M. F. Underwood for maps of the area.

South of the salt tract the deeds mention a 36 foot strip of land belonging to Henry Martindale, which was sold to him by William R. Harper on August 12, 1854; giving Mr. Martindale access to the sound from his extensive land holding to the west. South of this strip the land belonged to Charles Craig.

North of the salt tract lay the land of Thomas Craig, deceased. Thomas Craig bought from Richard Langdon in 1807 a tract of land "distinguished by the name of Prospect Hall, beginning at the mouth of a small creek nearly opposite to Cabbage Inlet . . . being bounded southerly by land of James Heasel [Hasell] Esqr. & Northerly by land formerly occupied by John Morris Esq, now occupied by Major John Walker containing one hundred acres more or less." 5 In 1846 the southern section of this tract was sold to Benjamin Craig and is described as being north of the "Hasell line (now Harper line) . . . containing 50 acres." 6 The northern section of Prospect Hall was sold by Thomas Craig in 1848 to Julia Trask, 7 and in 1869 this same tract was estimated to contain 100 acres. 8 From examining many deeds on this land, it is evident that the Prospect Hall tract contained approximately 150 acres, being bounded by Myrtle Grove Sound on the east, by Jumping Run Branch on the west, by the Hasell-Harper line on the south, and by the Walker line on the north. This complete tract was later acquired by Daniel W. Trask and sold, along with the Ottaway tract which joined it on the south, to W. Scott early in the 19th century. 9

The northern boundary of Prospect Hall abutted land belonging to Major John Walker in 1807. The Walker land was sold to Hanson Kelly in 1812, to William Tiner in 1818, to Thomas Cragg [Craig] in 1819, and was deeded by Thomas Craig to his two sons, Charles and John H., in 1873. It is described as containing 233 acres and "Beginning at a stake Northwardly of Cockly Shell Point, and to the Southward of Pekelen Point, Thomas Craig Senior's corner, running thence North 75° West three hundred and twenty six poles to a stake at the run of Jumping Run Branch, thence down the various courses of said Branch to the run of Purvis's Creek, thence down the run of said creek as it meanders to the sound, and thence along the sound to the first station." 10

The Walker-Craig tract was divided into two parcels of 116½ acres each. The northern half went to William H. Shaw in 1895, to A. E. McKethan in 1897, to W. A. Piner in 1903, and to the Strunkes in 1913. It was then sold off in lots known as Masonboro Bluffs. The southern half was sold to William M. Sneed in 1910, and the southern boundary of the Sneed land (formerly the Walker-Craig line) appears as the northern boundary of the present Tanglewood subdivision, located west of the present state road running from Purvis Creek to Carolina Beach. 11

The small creek, mentioned as the northeast corner of the salt tract and as the southeast corner of the Prospect Hall tract and described as being "nearly opposite Cabbage Inlet," is the same as Trask Creek on the Intra-Coastal Waterway Map of 1929 and has now been dredged and surrounded by the lots of Channel Haven. 12

The land which the State of North Carolina purchased in 1862 is a rectangular piece containing 220 acres, measuring 40 poles (660 ft.) along its western border and along Myrtle Grove Sound, and extending inland over 14,000 feet (2½ miles), or to a point about 3½ of a mile west of the present Rt. 132. The length of this tract of land is confirmed by a statement of J. M. Worth, Salt Commissioner, to Governor Vance in September 1862: "I am now trying to bring water 2½ miles into the woods," 13 presumably using the valuable steam pump mentioned in later reports. The old Federal Point Road ran slightly east of Rt. 132 and was intersected by the "old salt road" (mentioned in deeds of 1866 and 1917) in or near the area of the salt tract.

Mr. Elijah Hollis, a resident of Myrtle Grove Sound all of his 85 years, pointed out the "Pole Road," still evident in the undergrowth south of his property near Friendly Lane. He said that the pole road was a private corduroy road whose terminus near the sound shore branched off into several roads to surrounding properties, and that it ran northwest from Myrtle Grove into Wilmington and joined the present Dawson Street. The Pole Road presumably became the "old salt road" where it joined the Federal Point Road. The only other pole road he remembers on the sounds came into Masonboro on the Emerson place at Crown Point. Mr. Hollis also remembers several large piles of old bricks on the land which is now South Channel Haven.

On April 21, 1864, Federal forces from the blockading ships Nippon, Fort Jackson and Howqua entered Masonboro Inlet in six small boats, proceeded to the State salt works and attempted its destruction. Three separate reports of the raid exist. The commander of the North Atlantic Blockading Squadron, Admiral S. P. Lee, wrote to Gideon Welles, Secretary of the Navy, that the expedition against "the extensive and valuable State salt works" was "a complete success, which resulted in the destruction of 1 large steam pump, boilers and engines attached, 7 large boilers, about 200 salt pans,
the large vats, reservoirs and outbuildings of the establishment, a large windmill, and 50 or 60 government wagons."16

Captain B. F. Sands of the U.S.S. Fort Jackson, who organized the expedition, reported "dismantling and burning 30 Government wagons, 7 large buildings containing boilers, 2 horse sheds, 1 large and valuable steam pump, and 180 salt pans (which turned out 190 bushels of salt per day, employing over 200 conscripts)."17 Lieut. J. B. Breck who actually led the raid, in addition to reporting the destruction of "large vats and reservoirs," mentioned that "one of our prisoners had escaped and taken the road to Wilmington, the city being but 7 miles from us,"18 (a fairly precise measurement, tracing the course of the old Federal Point Road to about the center of the salt tract).

The day following the raid, General W. H. C. Whiting, in charge of the defenses of the Cape Fear District, wrote to Governor Vance: "Last night the enemy landed at the State salt works and destroyed one of them . . . ."19 David G. Worth, State Salt Commissioner, sent an account of the damage to the Wilmington Journal, part of which reads: "The greatest damage done was to the engines and pumps . . . If I could pump water, I could run 3 of the works today."20 The report of the Salt Commissioner to Governor Vance on May 6, 1864, two weeks after the raid, states: "The works at the point where the enemy made their raid are not yet running, on account of delay in getting the pump and engine repaired." But it adds: "The works are now in good condition, better than they have been for some time . . . . The three flats [hosts used for hauling wood] are working admirably. . . . Within the next three weeks I shall be able to discharge at least twenty-two horse teams."21 This leads us to assume that the raid did not damage all the works, being even more extensive than we imagine from Federal reports.

In the report of the State salt works at Wilmington for the year ending April 30, 1864, David G. Worth lists that he had on hand 2,000 cords of cut wood, 52 miles and horses, wagons, harnesses, etc., 5 flats, corn and forage, and 500 pounds of bacon. The works owned at that time 4 1/2 of a steam engine "J. R. Gris," and since the beginning had drawn from the State Treasury $100,000, which must have been spent for land, equipment, construction, and basic provisions, as the salt made at the works was sold at cost. During the year ending April 30, 1864, the State works was employing 270 men and had produced 86,000 bushels of salt, which has been sold at an average of $7.75 per bushel of 50 pounds.22

If the State salt works operated every day of the year and a bushel of salt weighed 50 pounds, they produced 8,500 pounds of salt per day. A gallon of sea water contains on the average 1/4 pound of salt,23 which means they would have had to process 33,000 gallons of sea water daily. We have not found a description of the State salt works at Wilmington and can only infer from evidence and descriptions of other large salt manufacturing processes how it must have operated. In August 1861, M. J. Raymond Thomassy, a French geologist specializing in the salt process, came to Wilmington to advise on location and construction.24 Mr. Thomassy planned salt works at Charleston and Alabama and was an advocate of solar evaporation. Since his advice had been sought, and since it would be impossible to obtain enough wood to boil away all the water as it came directly from the sound, we assume that water was pumped some distance and stored in a series of reservoirs, through which it was sluiced to the furnaces as it became more concentrated by solar evaporation.

There are two available descriptions of large salt furnaces from which we may be able to construct a picture of the North Carolina State process. The first is pre-war, and the second of a much larger salt works in Alabama. Both used brine several times more concentrated than sea water. In the early process, the large brick furnace had two openings in the rear, from which was "raised a wall to prevent ashes from flying into the salt pans. The pans are 15 feet long, 12 feet broad, and 15 inches deep . . . made of plates of wrought iron with strong cement in the joints. The sides of the pan are sometimes made of lead, as iron is apt to oxidize. . . . Near is a cistern, placed at such a height that the water can run out of it into the pans . . . . As the water approaches the boiling heat, the frothy scum or scarch is collected into small pans called scratch pans, one of which is at each corner of the boiler. . . . After 4 hours boiling, crystals begin to form on its surface. The pan is now filled to the top with fresh sea water from the cistern. [Water is added 2 more times.] At this period of the 4th boiling, the fire is allowed to become low so that the brine only remains, in which state it is kept for ten or twelve hours while the salt is granulating or falling in grains or small crystals to the bottom of the pan. When the water is nearly drawn off by evaporation, the salt, which is nearly dry, is raked together into heaps till the brine drains from it, and then conveyed to barrows. . . . In the store house, the salt is laid into drabs or wooden troughs, with shoveling bottoms, and a sliding board at the lower end, so as to allow the brine to run off. In 1 to 4 days the salt is generally quite dry."25

In the Alabama works the furnaces built during the war were described as being "thirty by forty feet long" with chimneys "towering to seventy feet in the air." . . . The walls of the furnace were usually two feet high, and, if carefully built with proper grates and doors, would distribute its heat from end to end, so that the maker's labors yielded him twenty to thirty-five bushels of salt a day, according to the salinity of the water. On top of the brick furnace were set "shallows pans about six feet long and three feet wide, but only about ten inches deep in the center, sloping to five inches at the ends. Five or six of these pans occupied the front of the furnace, holes being drilled in the edges so that they might be bolted together securely. . . . Next to this tank the saltmaker ranged several one-hundred gallon kettles, and then next to the chimney a double row of smaller vessels. . . . To still further reduce the cost of manufacture, some owners of large furnaces built three or four rows of furnaces of the type just described; all to enter into one common chimney."26

From this research, we can assemble a probable picture of the State salt works at its "present commodious location," as Governor Vance wrote.27 There may have been several clusters of smaller furnaces scattered throughout the tract. Windmills stood nearby to raise the water from the reservoirs to the salt pans, and cords of wood would be stacked close to the furnace openings. Not too far away would stand the sheds to hold the drying salt. Somewhere in the tract were buildings to store the provisions and shelter the horses and mules, as well as the salt workers who were not from this area. Near the shore stood the "large steam pump with boilers and engine attached,"28 and maybe in the creek was a dock for the three flat barges. At the extreme west of the tract was a salt furnace referred to as the "River Side Salt Works,"29 which was supplied with water brought up the river on the steamer J. R. Gris, and with wood brought in by the "Wilm. Charlotte R. Rd. Co."30 Small "trains,"31 transporting wood and salt from storage points, ran along tracks laid the length of the tract. A road, solid enough to support heavy wagons hauling in wood
and provisions and taking salt to town for shipment, ran to the Federal Point Road.

The State salt works at Wilmington was a major producer of salt for North Carolina. However, there were also innumerable private salt works along the coast between Bear Inlet and the South Carolina border which have been documented in reports, newspapers, and letters. In 1862, J. M. Worth estimated that the output of private works close to Wilmington averaged 1600 bushels per day. Most of the private salt was sold at a profit, sometimes almost three times the cost of the salt from the State works. As Federal raids became more frequent and as wood became scarce, the number of private works dwindled, the State salt works was suspended, and salt became a commodity worth more than gold by the end of the Confederacy.

FOOTNOTES

3. New Hanover County Deed Books: UU, p.674, Parsley to State, 26 April, 1862.
   Pub. Sale to Sanders, 14 Sept., 1858.
   RR, p.156, Sanders to Hewett, 21 Sept., 1861.
   RR, p.135, Hewett to Parsley, 21 Dec., 1861.
4. Ibid. UU, p.675, State to Bishop, 11 Feb., 1865.
   UU, p.676, State to Cathey, 11 Feb., 1865.
7. Ibid. CC, p.344, Th. Craig to Benj. Craig, 4 Feb., 1846.
8. Ibid. FF, p.181, Th. Craig to Trask, 11 Sept., 1848.
10. Ibid. 104, p.497, Trask to Scott, 20 July, 1879.
   Q, p.183, Kelly to Tiner, 12 May, 1818.
   Q, p.388, Tiner to Th. Craig, 15 Feb., 1819.
   GGG, p.60, Th. Craig to Charles and John Craig, 6 Feb., 1873.
   (quote from above)
12. Ibid. 16, p.388, Craig to Shaw, 7 Oct., 1895.
   19, p.740, Shaw to McKeithan, 6 April, 1897.
   45, p.32, McKeithan to Piner, 20 July, 1905.
   72, p.201, Piner to Trunk and Trunk, 25 May, 1910.
   60, p.421, Craig to Sweden, 12 March, 1910.
   New Hanover County Map Book 7, p.14, Tanglewood Division.
   N. H. Map Book 7, p.29, Channel Haven Division.
   37 p.93, Craig to Holc, 27 April, 1917.
   Map: Sheet 1422 III AMS Series V42, Wilmington, 1948.
17. Ibid. p.675, Capt. B. E. Sands to Adm. S. P. Lee, 22 April, 1864.
18. Ibid. p.676, Lieut. J. B. Brock to Capt. B. E. Sands, 22 April, 1864.
20. Wilmington Journal, April 28, 1864.
   P.1 "Report of the Salt Commissioner, D. G. Worth, Report End-
   ling Apr. 30, 1864."
   P.4 "Report of the State Salt Commissioner, D. G. Worth to Gov.
   Z. B. Vance, May 6, 1864."
   (Thanks to Betsy Flehman, State Dept. of Archives and History)
27. Ibid. D. G. Worth to Z. B. Vance, 1 Oct., 1864.